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ABSTRACT

A few of the relationships between individuals who are eligible for and receive financial support from federal and nonfederal sources are examined as they bear on policy-making. The data on which this report is based are from the National Longitudinal Study of the High School Class of 1972 (NLS) sponsored by the National Center for Education Statistics. This report uses base-year and first follow-up (i.e., 1972 and 1973) data. Descriptive statistics are given relating to socioeconomic status and ability and current patterns of student financial support for postsecondary education. Fewer than half of the high school seniors who had planned in the spring of 1972 to obtain some kind of aid reported having received such aid during the 1972-1973 academic year. In general, the probability that these students would fulfill their specific financial aid plans (e.g., plan for and receive a federal scholarship) was quite low; the probability that they would receive support from some federal or nonfederal source was considerably higher. The probability of financial aid plan fulfillment varied according to student subgroup as well as by source of funds. For example, low SES students were more likely to fulfill their plans for federal aid; high SES students for nonfederal aid. Regardless of prior plans, it appears that the type of postsecondary school entered was an important factor in receiving financial assistance. (Author/LBH)

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Money and College: Differences in Ability and SES

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Money and College: Differences in Ability and SES

INTRODUCTION

The most appropriate program for the financing of postsecondary education in the United States is one of the more complex and controversial issues facing educators, economists, and politicians today. The goal of such a program should be the removal of all economic barriers to postsecondary education, though there is considerable disagreement concerning the most efficient and effective means of achieving this goal. The American public, as well as its elected policymakers and appointed administrative staff, seem generally to agree that no young person should be deprived of postsecondary education because of happenstance of birth or economic condition, but rather that qualified individuals who are interested in further education can be afforded that opportunity. That every individual should be allowed to develop his or her talents fully is basic to our democratic philosophy. But the more pragmatic justification for the concept of student financial aid lies in the fact that, as a nation, we all have a stake in the education of our youth. The United States needs both an educated citizenry and an adequate work force qualified to fill increasingly complex jobs and meet critical manpower shortages. Thus, by helping individuals to develop more fully their capabilities, society as a whole also benefits from the investment.

Over the past decade, this philosophy has led to the introduction and expansion of numerous federally- and nonfederally-supported student financial assistance programs, most of which are targeted for students from low-income families. Generally speaking, these programs include three types of support: loans, work-study, and grants or scholarships. Loans and work-study programs provide an opportunity for self-help but much of the financial burden remains on the student or his family (though most public and institutional loan programs carry low interest rates, at least while education continues). In contrast, programs that provide support in the form of grants or scholarships require no repayment or work obligations. The Federal government (and virtually every State government) is regularly

confronted with the task of reexamining existing student aid programs and with making recommendations regarding their continuation or elimination, the addition of new programs, and the proper funding levels for these programs.

The purpose of this report is to examine only a few of the relationships between individuals who are eligible for and receive financial support from federal and nonfederal sources as they bear on policy relevant questions in this area.

The data on which this paper is based are from the National Longitudinal Study of the High School Class of 1972 (NLS) sponsored by the National Center for Education Statistics and carried out by Research Triangle Institute. Broadly speaking, NLS uses a national sample of over 20,000 1972 high school seniors on whom extensive base-year and follow-up information have been collected. This report uses base-year and first follow-up (i.e., 1972 and 1973) data. Details as to sample design, instrumentation, data collection methods, and data characteristics are available from NCES and RTI.

VARIABLE SPECIFICATION

Classification Variables

Basic classification variables used in most descriptive analyses of the NLS data include six which define subpopulations of special interest to policymakers and researchers in many areas including financial aid to education. These are as follows: sex, high school program, race, geographic region, ability, and SES. The latter two are composite variables which require some further discussion inasmuch as they will be the focus of this paper.

Ability. Ability level is derived from scores made on four of six base-year tests: Vocabulary, Reading, Letter Groups, and Mathematics. Factor analysis of the test scores revealed a basis for constructing a composite score measuring general academic ability by forming an equally weighted linear composite of these four test scores. Each test entering the composite was standardized to a mean of 50 and a standard deviation of 10. This continuous ability score was then classified into a high, middle,

or low category depending on whether the score was in the upper quartile, middle two quartiles, or lower quartile. The cutoff points for defining these quartiles were based upon a weighted estimate of the test score composite standard deviation and the assumption that the weighted frequency distribution was normally distributed. However, because low socioeconomic students were oversampled and SES is correlated with ability, more than 25 percent of the sample members fell into the lowest quartile for the ability composite. The reason for this is that the weighted estimate of the quartile takes into consideration the fact that low SES (and, consequently, low ability) students were oversampled and gives an estimate of the population distribution parameters for the senior class of 1972. However, since low SES (and low ability) members are overrepresented in the sample, one would expect more members of the sample itself to lie in the lowest quartile. A substantial number of sample members (6,539) did not have test scores. Most of these sample members were from the "resurvey" group who did not originally participate during their senior year when testing was conducted in the schools.

Socioeconomic Status (SES). This derived measure is based upon a composite score involving five components: father's education, mother's education, parental income, father's occupation, and a household items index. Questions concerning these five components were asked in both the base-year Student Questionnaire and the "resurvey" First Follow-Up Questionnaire (Form B). The regular First Follow-Up Questionnaire (Form A) asked questions concerning father's education, mother's education, and father's occupation. Valid responses to the appropriate question on the First Follow-Up Questionnaire or base-year Student Questionnaire were used as the data source. For some items, the First Follow-Up Questionnaire was used as the primary data source and the base-year Student Questionnaire was used in the event of missing data. For other items, the base-year Student Questionnaire was used as the primary data source and the First Follow-Up Questionnaire was used in the event of missing data. These components were first subjected to a factor analysis, which revealed a common factor with approximately equal weights for each of the five components. Missing components were imputed by using the appropriate component mean of the subpopulation

of which the respondent was a member. These subpopulations were defined by cross-classifying by race, high school program, and aptitude. An SES score was computed by averaging the available standardized components. This average was based upon both imputed and nonimputed components for some individuals. However, in order for an SES score to be computed, the respondent had to have at least two nonimputed components available. The continuous SES score was then assigned to a high, middle, or low category depending on whether it fell in the top quartile, middle two quartiles, or bottom quartile. The cutoff points for the quartiles were based upon the population SES distribution estimated using sample weights. Since schools located in low-income areas and schools with high proportions of minority group enrollments were oversampled, more than 25 percent of the sample members fell into the lowest quartile. There were 656 individuals who could not be classified in terms of SES.

As noted, one of the equally weighted SES components was parental (or family) income, whose relationship with financial aid participation is of special interest because it reflects a basic component of financial need that is currently considered in financial aid decisions. Income is also a type of measure that has scale properties (i.e., ratio) that allow for easy interpretation of the meaning of a scale value or scale value interval. For example, we know what meaning to attach to an income interval of $6,000 to $8,999, but we have trouble interpreting what the lowest quartile of a complex index such as SES means. However, the SES measure used in this report is similar to those used in other large-scale surveys to define subpopulations with economic and/or educational needs. Because of the comparability of our SES measure to measures in other surveys, many researchers might prefer using SES as a means of defining target populations for financial needs analyses. On the other hand, financial need analysts may feel more comfortable with using income as a means for defining these target populations.

The estimated correlation between family income and the SES composite is .75. In general, both of these measures of need behaved in the same manner (i.e., showed similar strengths and directions of relationships with other variables) and, consequently, general statements about the relationships of SES and income to financial aid would be identical.

Financial Aid Variables

Financial aid variables include measures of the source and type of student aid planned for in spring of 1972 and/or received during the 1972-73 academic year. Data for the former were obtained from Question 22 of the Base-Year Student Questionnaire, which asked: "Do you plan to use funds available from any of the following programs for further study beyond high school?" Similarly, Question 47 of the First Follow-Up Questionnaire asked those continuing in any form of postsecondary education to indicate the sources (and corresponding amounts) of funds used to meet their expenses. For reporting purposes, the programs or sources listed under both questionnaire items were grouped into the following categories:

(1) Federal scholarships or grants -- includes the Educational Opportunity Grant Program, ROTC scholarship program, Nursing Scholarship Program, Law Enforcement Education Program, and Health Professions Scholarship Program;

(2) Federal loans -- includes Federal Guaranteed Student Loan Programs, National Defense (Direct) Student Loan Program, Health Professions Student Loan Program, and Nursing Student Loan Program;

(3) College Work-Study Programs

(4) Other Federal Programs -- includes Veterans Administration War Orphans or Survivors Benefits Program, Veterans Administration direct benefits (GI Bill compensation or pension), Vocational Rehabilitation Program benefits, and Social Security Benefits (for students 18-22 who are children of retired, disabled, or deceased parents);

(5) Federal Aid -- includes all programs listed under (1), (2), (3), and (4) above;

(6) Non-Federal Aid -- includes college scholarships or grants from college funds, state scholarships, other scholarships, state loan programs, and regular bank loans; and

(7) Federal or Non-Federal Aid -- includes all programs or sources listed above.

The First Follow-Up Questionnaire provided for two additional categories of financial support: savings or earnings, including the individual's own savings or summer earnings; and family support, including support from parents, husband or wife, and other relatives or friends.

The analyses reported in the following sections did not consider whether the individual planned for or received aid from only one source, or from several sources or source categories, and thus there will be some overlapping, or individuals with more than one type of aid. More refined analyses, planned for a later date, will take these overlaps into account.

Population Estimates

Unless otherwise specified, all statistics presented throughout this paper are weighted estimates of population percentages. Standard errors of estimate for these percentages can be estimated from the standard error table presented in the Appendix. The reader should refer to this table before making any inferences concerning percentages or percentage differences.

Some sample members are excluded from a given analysis because financial aid planning or status data were missing. In addition, some sample members are excluded from a given analysis because of missing data on a basic classification variable. The joint effect of these two sources of missing data (classification variables and financial aid planning or status variables) has not been determined, although the effects of bias from missing activity state data alone or classification data alone are probably small.

FINANCIAL AID PLANS IN SPRING 1972

Of the nation's 1972 high school seniors who were planning to continue their education beyond high school, 65.1 percent planned to obtain some type of financial assistance for this purpose from sources other than their families, personal savings, or earnings. And, somewhat unexpectedly, a substantially higher proportion of students were planning to utilize non-Federal aid (54.4 percent) than Federal aid (40.5 percent). The extent to which student financial aid plans differ for various subgroups defined by the basic classification variables can be seen by examining Table 1. While each cell in Table 1 could warrant a full discussion, this paper will focus on ability and SES differences.

Table 1

PERCENTAGE OF SENIORS PLANNING POSTSECONDARY EDUCATION WHO ARE ALSO PLANNING TO USE FINANCIAL AID, BY TYPE OF AID AND BY STUDENT SUBPOPULATION GROUP: SPRING 1972

Source and Type of Aid	Total	Sex		Race			SES*			Ability			H. S. Program			Region			
		Male	Female	Black	White	Spanish-American	High	Medium	Low	High	Medium	Low	General	Academic	Voc/Tech	North-east	North Central	South	West
Federal or Non-Federal Aid	65.1	66.1	64.0	84.9	63.0	70.8	53.9	67.7	77.0	69.4	60.1	69.7	59.4	67.5	62.9	67.7	66.4	63.5	60.6
Non-Federal Aid	54.4	55.2	53.7	70.4	52.8	56.9	46.0	56.9	62.3	61.3	49.1	53.8	45.6	58.7	49.2	60.0	55.9	50.8	48.4
Federal Aid	40.5	40.4	40.7	66.2	37.4	56.3	29.4	41.6	56.8	42.1	37.1	47.5	37.5	41.6	41.0	38.9	41.7	41.5	39.7
Federal Scholarships or Grants	13.1	13.0	13.1	33.0	10.5	31.7	7.8	12.8	22.8	11.2	12.2	19.9	12.4	13.2	13.9	11.1	13.2	13.1	15.9
Federal Loans	18.1	16.4	19.8	35.8	16.0	25.0	11.9	19.2	26.0	21.5	15.1	19.6	14.0	19.8	17.4	19.2	19.4	17.5	15.4
College Work-Study Programs	22.0	21.3	22.6	38.2	20.0	32.3	16.9	21.8	31.1	24.8	19.1	23.4	18.3	23.8	19.6	20.9	23.1	22.4	21.1
Other Federal Programs	10.7	11.0	10.5	18.3	9.8	14.7	5.8	10.6	19.5	8.2	10.1	18.6	13.1	8.9	15.9	9.7	9.5	12.3	12.0
Total N (unweighted)	9556	4676	4872	1135	7488	384	2946	4434	2139	3330	4092	1656	2553	5630	1373	2164	2517	3099	1776

Socioeconomic Status (SES) Differences

The relationship between SES and planning for financial aid is clear and in the expected direction. Substantially greater percentages of low SES seniors than of either middle or high SES seniors were planning to use each type of financial support. Conversely, high SES students were much less likely than either low or middle SES students to plan for each type of financial aid, reflecting (particularly for Federal programs) an awareness of the requirement that aid be primarily for those who are unable to pay.

Ability Differences

Unlike that for SES, the relationship between ability and planning for financial aid is not easy to discern. Table 1 shows that high ability students were more likely than either medium or low ability students to plan for non-Federal aid. High ability seniors were also more likely to plan for Federal loans but less likely to plan for Federal scholarships or grants. Medium ability students were least likely to be planning for either Federal or non-Federal aid. Since non-Federal (institutionally administered) aid programs are likely to be geared more to ability, and somewhat less to need, than Federal programs, it may be that high ability seniors were planning on financial aid as rewards for their scholastic achievement, while many low ability students expected to receive aid on the basis of their financial need.

Reasons for No Financial Aid Plans

Of the 9,556 NLS sample members who reported that they planned to engage in some form of postsecondary education during the year after they leave high school, 3,256 (or 34.9 percent) also indicated that they had no definite or specific plans to use funds from any of the various student financial aid programs for this purpose. The reasons given by these individuals for not planning to use financial aid from sources outside the family are shown below.

	Weighted Percentage	
	Apply	Does Not Apply
My parents or I will be able to pay	76.4	23.6
I do not want to go into debt	39.8	60.2
I do not expect to qualify for [aid] because of my family's income.....	35.8	64.2
I do not expect to qualify for [aid] because of my high school grades.....	26.5	73.5
I do not expect to qualify for [aid] because of my test scores	23.1	76.9
Students from my racial/ethnic group have too much difficulty getting financial aid..	7.4	92.6
Some other reason.....	23.2	76.8

It is significant that almost 40 percent of these high school seniors gave "I do not want to go into debt" as their reason for not planning to obtain financial aid for further education. This apparent reluctance on the part of some individuals to go into debt could limit access to post-secondary education and thus has obvious policy implications for those concerned with student financial aid programs.

FINANCIAL AID STATUS IN 1972-73

The two largest sources of financial support for students in general and for those enrolled in all three types of postsecondary schools were family support and personal savings or earnings. More important, however, is the fact that a much higher proportion of students attending four-year colleges or universities (43.8 percent) than of those attending two-year institutions (27.3 percent) or vocational-technical schools (30.7 percent) received some type of Federal or non-Federal aid other than family or personal support. Table 2 shows percentages of those enrolled in post-secondary education who received financial aid in 1972-73.

Table 2

PERCENTAGE OF STUDENTS ENROLLED IN POSTSECONDARY EDUCATION RECEIVING FINANCIAL AID, BY TYPE OF AID AND TYPE OF SCHOOL: 1972-73

Source and Type of Aid	Total	Type of School		
		Voc/Tech	2-Year College	4-Year College
Federal or Non-Federal Aid	36.2	30.7	27.3	43.8
Non-Federal Aid	22.9	11.6	15.6	30.3
Federal Aid	22.6	21.9	16.0	27.3
Federal Scholarships or Grants	6.6	3.6	4.8	8.6
Federal Loans	12.6	13.1	4.5	17.3
College Work-Study Programs	6.7	3.0	6.1	8.4
Other Federal Programs	4.6	5.0	5.4	4.3
Savings or Earnings	53.8	40.3	54.2	59.4
Family Support	59.4	47.4	54.2	68.1
Total N (unweighted)	11421	1559	3047	6128

Table 3

PERCENTAGE OF STUDENTS ENROLLED IN POSTSECONDARY EDUCATION RECEIVING EACH TYPE OF FINANCIAL AID, BY TYPE OF SCHOOL AND ABILITY: 1972-73

Source and Type of Aid	Total			Voc/Tech			2-Year College			4-Year College		
	High Ability	Medium Ability	Low Ability	High Ability	Medium Ability	Low Ability	High Ability	Medium Ability	Low Ability	High Ability	Medium Ability	Low Ability
Federal or Non-Federal Aid	42.6	33.1	29.1	36.7	31.3	27.7	32.2	25.1	26.5	45.6	40.8	34.6
Non-Federal Aid	31.9	18.3	11.5	18.5	12.6	7.4	22.3	13.4	10.9	35.1	24.3	19.8
Federal Aid	23.7	21.6	22.0	24.1	21.8	21.3	15.1	15.1	19.8	26.0	27.2	34.0
Federal Scholarships or Grants	6.8	5.9	7.6	4.5	3.9	2.9	4.9	4.6	5.4	7.4	7.8	18.5
Federal Loans	14.9	11.6	9.8	14.3	13.2	11.9	4.7	4.1	4.6	17.6	17.2	18.2
College Work-Study Programs	7.3	6.4	6.9	4.7	2.6	3.0	6.6	5.4	6.5	7.7	9.0	14.6
Other Federal Programs	3.9	4.7	5.4	4.2	4.8	5.4	4.8	5.2	7.4	3.7	4.5	4.8
Savings or Earnings	64.6	53.9	36.6	61.0	43.9	31.6	63.2	56.9	46.0	65.9	56.8	39.6
Family Support	69.6	59.1	40.3	56.9	52.5	35.3	58.8	57.1	43.4	73.7	65.4	54.3
Total N (unweighted)	3091	3545	1420	169	586	379	523	1124	470	2299	1659	386

Table 4

PERCENTAGE OF STUDENTS ENROLLED IN POSTSECONDARY EDUCATION RECEIVING EACH TYPE OF FINANCIAL AID, BY TYPE OF SCHOOL AND SES: 1972-73

Source and Type of Aid	Total			Voc/Tech			2-Year College			4-Year College		
	High SES	Medium SES	Low SES	High SES	Medium SES	Low SES	High SES	Medium SES	Low SES	High SES	Medium SES	Low SES
Federal or Non-Federal Aid	27.0	39.7	49.7	25.3	29.2	38.2	13.7	29.1	44.5	31.3	52.0	67.7
Non-Federal Aid	19.4	24.7	27.4	10.9	11.2	13.9	9.0	16.9	22.7	23.5	35.2	43.0
Federal Aid	13.5	25.3	36.5	16.1	20.6	28.6	5.8	16.4	31.9	15.7	34.3	49.9
Federal Scholarships or Grants	2.4	7.0	15 0	1.4	3.2	5.7	0.5	4.7	12.3	3.2	10.1	24.8
Federal Loans	7.4	14.8	18.9	8.7	13.0	16.5	1.1	4.5	10.0	9.4	23.1	29.4
College Work-Study Programs	3.5	7.2	12.9	3.8	1.9	5.0	1.7	6.0	13.9	3.9	10.4	18.9
Other Federal Programs	3.0	5.0	7.3	3.5	4.3	7.1	3.2	5.8	8.3	2.9	5.0	7.7
Savings or Earnings	56.4	56.9	45.9	45.7	44.1	32.9	49.8	58.0	54.4	60.3	63.0	52.7
Family Support	73.7	58.1	41.3	61.4	52.0	35.6	66.3	53.3	43.2	78.3	65.6	49.3
Total N (unweighted)	3749	5084	2322	196	781	545	787	1527	664	2634	2471	895

The likelihood, or opportunity, of getting some Federal aid was considerably higher for students who enrolled in four-year colleges than it was for students enrolled in other types of postsecondary institutions. Students in vocational-technical schools and two-year colleges also reported fewer Federal loans and participated less frequently in work-study programs than did their contemporaries in four-year colleges and universities. These findings are potentially significant in view of the fact that public policy at the Federal level has called for the expansion of educational opportunities at both vocational-technical schools and two-year community colleges.

Relationship of Financial Aid to Ability Level

The relationship between ability level and financial aid participation varied by type of aid--Federal or non-Federal--as well as by type of post-secondary school. Table 3 shows that high ability students were more likely to receive non-Federal aid, regardless of the type of school attended. However, this relationship does not hold with respect to Federal aid (especially Federal scholarships or grants) and, in fact, for two- and four-year colleges the inverse seems to be true. As noted below, this finding probably reflects the tendency to allocate Federal aid more on the basis of need than educational qualifications.

Relationship of Financial Aid to Socioeconomic Status

Table 4 presents the percentages of students attending postsecondary school that participated in each type of financial aid by SES and type of school. As one would expect, the proportions of individuals receiving financial aid of any sort (Federal or non-Federal) increased as SES level decreased. In other words, participation in student financial aid programs was inversely related to SES. These differences in the financial aid participation rates of SES groups were greatest among students attending four-year colleges or universities. Furthermore, as Table 5 shows, this relationship is consistent across all levels of ability; that is, within ability groups, the higher a student's SES, the less likely he was to have received financial aid. Table 5 also demonstrates, however, that the

Table 5

PERCENTAGE OF STUDENTS ENROLLED IN POSTSECONDARY EDUCATION RECEIVING EACH TYPE OF FINANCIAL AID, BY ABILITY AND SES:* 1972-73

Source and Type of Aid	High Ability			Medium Ability			Low Ability		
	High SES	Medium SES	Low SES	High SES	Medium SES	Low SES	High SES	Medium SES	Low SES
Federal or Non-Federal Aid	31.9	49.6	67.2	19.3	36.4	48.3	20.4	21.6	41.1
Non-Federal Aid	25.3	35.8	49.4	11.6	19.9	25.4	10.5	8.8	15.2
Federal Aid	14.7	29.8	43.2	10.2	23.8	35.6	11.8	15.0	33.7
Federal Scholarships or Grants	3.3	9.0	14.9	1.0	5.3	16.6	2.4	4.0	13.6
Federal Loans	8.6	20.0	25.0	5.3	13.3	18.1	4.0	5.7	16.7
College Work-Study Programs	4.4	9.1	14.1	2.5	6.5	13.5	3.5	4.9	10.5
Other Federal Programs	2.3	4.3	10.2	3.1	4.9	7.2	4.1	5.0	6.3
Savings or Earnings	61.5	67.9	65.1	52.5	56.3	49.3	44.1	36.0	35.8
Family Support	78.0	64.3	50.4	68.6	58.9	42.9	61.6	41.9	32.5
Total N (unweighted)	1496	1296	297	1029	1822	688	165	579	660

*See Table A-2, Appendix A, for breakdown by family income level.

probability of receiving non-Federal aid was more highly related to ability than was the probability of receiving Federal aid. This finding is consistent with and reinforces the tendency manifested in Table 4 and noted in the previous paragraph.

Fulfillment of Financial Aid Plans

The correspondence between spring 1972 financial aid plans and 1972-73 academic year financial aid status for the total group and for ability and SES subgroups is summarized in Table 6. For ease and clarity of presentation, only the three broadest categories of student aid have been included in this table. It was felt that these three categories would suffice to illustrate the most important findings regarding fulfillment of financial aid plans.

Fewer than half (44.9 percent) of the high school seniors who planned in the spring of 1972 to obtain some kind of Federal or non-Federal aid for postsecondary education actually received such aid during the 1972-73 academic year. A higher proportion of individuals planning to obtain Federal aid were able to fulfill their plans (38.1 percent) than were those who planned for non-Federal aid (33.3 percent). In general, while this table indicates that the probability that these high school seniors would fulfill their specific financial aid plans was quite low, the probability that they would receive some type of Federal or non-Federal support was much higher (i.e., approaching .50).

The relationship of plan fulfillment to SES was dependent upon source of student aid. With respect to plans for non-Federal aid, 35.0 percent of the high SES seniors fulfilled such plans while the corresponding percentages for the medium and low SES groups were 33.4 percent and 31.0 percent, respectively. On the other hand, low SES seniors were more likely than high SES seniors to fulfill their plans for Federal aid.

There was a strong and consistent relationship between ability level and fulfillment of financial aid plans. Regardless of aid category, the higher the seniors' ability level the more likely they were to fulfill their plans for financial support.

Table 6

FULFILLMENT OF FINANCIAL AID PLANS FOR THE TOTAL GROUP SES AND ABILITY SUBGROUPS

Source and Type of Aid Planning for in Spring 1972	Source/Type of Aid Received in 1972-73 Academic Year: Federal or Non-Federal Aid	Non-Federal Aid	Federal Aid	Total N (unweighted)
Total Group				
Federal or Non-Federal Aid	44.9	29.2	27.9	6300
Non-Federal Aid	46.7	33.3	27.3	5201
Federal Aid	49.4	29.2	38.1	4033
SES				
High SES				
Federal or Non-Federal Aid	41.3	30.8	20.7	1583
Non-Federal Aid	43.9	35.0	20.6	1345
Federal Aid	46.9	31.5	30.9	864
Medium SES				
Federal or Non-Federal Aid	45.9	29.4	28.8	3042
Non-Federal Aid	47.5	33.4	28.2	2527
Federal Aid	50.7	29.7	37.9	1914
Low SES				
Federal or Non-Federal Aid	47.0	27.0	34.4	1655
Non-Federal Aid	48.7	31.0	34.1	1312
Federal Aid	49.4	26.3	40.0	1243
ABILITY				
High Ability				
Federal or Non-Federal Aid	54.3	41.3	30.6	2286
Non-Federal Aid	56.2	45.1	30.5	2020
Federal Aid	60.6	43.5	42.3	1393
Medium Ability				
Federal or Non-Federal Aid	41.6	23.1	27.6	2511
Non-Federal Aid	42.6	26.6	26.5	2033
Federal Aid	45.9	21.9	35.8	1589
Low Ability				
Federal or Non-Federal Aid	27.9	11.9	20.8	1187
Non-Federal Aid	28.3	13.9	19.8	897
Federal Aid	31.7	12.5	25.1	843

SUMMARY

This paper has discussed some descriptive statistics relating to SES and ability and current patterns of student financial support for post-secondary attainment. Almost two-thirds of the nation's high school seniors (class of '72) who were planning to continue their education beyond high school indicated that they also planned to obtain some type of financial aid for this purpose. A substantially higher percentage of these students were planning for non-Federal as opposed to Federal assistance. Fewer than half of the high school seniors who had planned in the spring of 1972 to obtain some kind of Federal or non-Federal aid for postsecondary education reported having received such aid during the 1972-73 academic year. In general, while the probability that these students would fulfill their specific financial aid plans--e.g., plan for a Federal scholarship and receive a Federal scholarship--was quite low, the probability that they would receive support from some Federal or non-Federal source was considerably higher (i.e., about .50). The probability of financial aid plan fulfillment varied according to student subgroup as well as by source of funds. For example, low SES students were more likely to fulfill their plans for Federal aid than were their respective counterparts. In contrast, high SES students were more likely to fulfill their plans for non-Federal aid.

Regardless of prior plans, it appears that the type of postsecondary school that an individual entered was an important factor in whether or not he/she received some kind of financial assistance. Students attending four-year colleges or universities were much more likely to report getting both Federal and non-Federal aid than were students enrolled in two-year or vocational-technical schools. Participation in financial aid programs was also strongly related to SES and ability. Low SES (low income) students were more likely to report both Federal and non-Federal aid than were high SES (high income) students; ability level was more highly related to the probability of receiving non-Federal than Federal aid.

APPENDIX

Appendix

RELIABILITY OF THE ESTIMATES

The procedure used to estimate percentages in this survey involved the application of sample weights to allow unbiased estimates of national parameters. The weights were calculated as the inverse of sample inclusion probabilities for all students sampled, and were adjusted for nonresponse of the sample members. The sum of the individual weights was thus an estimate of the total number of the 1972 high school seniors in the United States.

Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if the entire population of the 1972 high school seniors were surveyed using the same survey procedures. As in any sample survey study, the results obtained from samples are therefore subject to sampling error as well as response errors and data processing errors.

The standard error is primarily a measure of sampling variability; that is, it reflects the variations that occur by chance because a sample rather than the entire 1972 high school class was surveyed. By referring to a statistic's standard error, one may infer in probability terms how close the sample value is to the population value and, consequently, how confident one may be in making inferences concerning a population parameter. For example, one may claim that the chances are about 68 out of 100 that an estimate from the sample would differ from the population value by less than the standard error, that the chances are about 90 out of 100 that the sample value would differ from the population value by less than 1.6 times the standard error, and that the chances are about 95 out of 100 that the difference between sample and population values would be less than twice the standard error.

This appendix can be used to estimate the standard error of percentages presented in the tables of this report. The standard error for a percentage is approximately a function of the sample size, the estimated percentage, and the subpopulation for which the estimate is to be made.

Knowing these three values, the reader can refer to the table and determine the approximate standard error. Surrounding the estimated percentage by plus and minus 2 standard errors will yield an interval in which the population percentage would fall 95 out of 100 times if the exact same sampling and estimation procedure was repeated indefinitely.

Appendix Table 1

APPROXIMATE STANDARD ERROR OF ESTIMATED PERCENTAGE

Estimated percentages	Sample Size for Base of Percentages																
	100	250	500	750	1,000	1,500	2,000	2,500	3,000	4,000	5,000	6,000	8,000	10,000	12,000	16,000	20,000
1 or 99%	1.0	0.7	0.5	0.4	0.34	0.28	0.24	0.22	0.20	0.17	0.16	0.14	0.12	0.11	0.10	0.09	0.08
5 or 95%	2.4	1.5	1.1	0.9	0.78	0.65	0.56	0.50	0.46	0.40	0.36	0.33	0.29	0.26	0.24	0.21	0.18
10 or 90%	3.4	2.2	1.5	1.3	1.11	0.91	0.79	0.71	0.65	0.57	0.51	0.47	0.41	0.36	0.33	0.29	0.26
15 or 85%	4.1	2.6	1.9	1.5	1.33	1.10	0.95	0.86	0.78	0.68	0.61	0.56	0.49	0.44	0.40	0.35	0.31
20 or 80%	4.6	2.9	2.1	1.7	1.51	1.24	1.08	0.97	0.89	0.77	0.69	0.63	0.55	0.50	0.45	0.40	0.35
25 or 75%	5.0	3.2	2.3	1.9	1.64	1.35	1.18	1.06	0.97	0.84	0.76	0.69	0.60	0.54	0.49	0.43	0.39
30 or 70%	5.3	3.4	2.4	2.0	1.75	1.44	1.25	1.12	1.03	0.89	0.80	0.74	0.64	0.57	0.53	0.46	0.41
35 or 65%	5.5	3.6	2.6	2.1	1.83	1.50	1.31	1.17	1.07	0.93	0.84	0.77	0.67	0.60	0.55	0.48	0.43
40 or 60%	5.7	3.7	2.6	2.2	1.88	1.55	1.35	1.21	1.11	0.96	0.86	0.79	0.69	0.62	0.57	0.49	0.44
45 or 55%	5.8	3.7	2.7	2.2	1.91	1.57	1.37	1.23	1.13	0.98	0.88	0.81	0.70	0.63	0.58	0.50	0.45
50%	5.9	3.8	2.7	2.2	1.93	1.58	1.38	1.24	1.13	0.98	0.89	0.81	0.71	0.63	0.58	0.51	0.45